CALIFORNIA DEPARTMENT OF EDUCATION DIAGNOSTIC CENTER, SOUTHERN CALIFORNIA

Asperger Syndrome

In the early 1940's a Viennese physician, Franz Asperger described a group of children whose common problem was an inability to adjust to the structure and routines of school. These children were often very bright, and had extensive knowledge about unusual topics of interest. Today, children are given the diagnosis of Asperger Syndrome when they have poor social interactions with their peers, and also have perseverative behavior and/or interests (Perseveration is defined as an abnormal focus on a narrow topic of interest, or difficulty switching from one thought or topic to another). These children may be viewed by others as "little professors" because of their interest in gathering facts about a specific topic of interest. Intelligence is in the normal range on IQ tests, and some children test in the gifted range. However, the child often has difficulty using this intelligence in practical ways. Asperger Syndrome is generally considered to be the highest functioning form of an Autistic Spectrum Disorder.

The diagnosis of Asperger Syndrome is used inconsistently in the community, schools and in medical practice. Sometimes children are given the diagnosis of Asperger Syndrome when a label of high functioning Autism is more correct. There is continuing debate among the experts about the dividing line between Autism and Asperger Syndrome. Some people incorrectly identify individuals who are socially inept or a bit odd, but otherwise perfectly normal, as having Asperger Syndrome. Sometimes children who are depressed, anxious or who have another type of social adjustment problem are also mislabeled with Asperger Syndrome. For educational purposes, it is important to use the term Asperger Syndrome only for children who fit the approved diagnostic criteria. If a child is incorrectly diagnosed, it is less likely that his educational or mental health needs will be met.

Social Interactions

Individuals with Asperger Syndrome have difficulty in initiating and maintaining social interactions. Social interest may change as the child matures. Younger children are often quite happy being alone, although they will interact with people who are willing to be an audience for their particular interests. They rarely seek other people for comfort and affection, or offer it to others in distress. There may even be inappropriate responses to other people's emotions, such as laughing when someone is hurt or crying. Other children identify them as "different" and may avoid them. As they get into adolescence, children with Asperger Syndrome may become socially interested, but at a loss as to how to interact with their peers. They fail to develop the complex social skills that involve a mutual sharing of interests, activities and emotions. They also tend to have difficulties with the body language and "teen speak" that are the foundation of adolescent peer interaction.

Language and Communication

Children with Asperger syndrome often have large vocabularies, and excellent grammar. However, they still have difficulty with communication. They commonly have problems in the social use of language (pragmatics) and in comprehension of more abstract language concepts. These children are usually very literal in their interpretation of what people say. They may have difficulty reading the

facial expression, tone of voice, and body language that convey much of the meaning in conversation. However, poor eye contact often improves dramatically when they are talking about one of their specific interests. Speech usually centers on one or two topics of interest. When someone else introduces new topics, the child generally becomes disinterested, or tries to bring the topic back to one of his interests.

Restricted and Repetitive Interests

The interests of children with Asperger Syndrome are commonly very narrow, and may be exotic. Encyclopedic knowledge of facts about odd topics such as orchids or train schedules may occur. Sometimes the topic is more age appropriate, but still odd. Some boys become experts at sports statistics, or particular aspects of video games or computers, but they do not use their knowledge in the usual ways, and may have no interest in other aspects of the subject. So, a child may know enough sports statistics to rival a broadcaster, but have no interest in the game itself.

A few children with Asperger syndrome have very limited interests, but do not have the special areas of interest or achievement that are commonly seen.

Idiosyncratic Behavior

There are a variety of unusual behaviors, sometimes labeled "Autistic-like," or just atypical. Children with Asperger are often clumsy. They may have highly developed rituals, preferences for routines, and a need for order or sameness. They may over react to changes in schedule or how things are done. Their sensory system often seems to process sensations differently, and there may be an altered sensitivity to pain, touch, sound, and visual stimuli. The child may exhibit emotional characteristics of anxiety or excessive fearfulness.

The atypical behaviors of these children are part of the child's brain structure and function, and are not the result of a character defect, poor parenting, emotional trauma or poor educational or social environments. However, difficult situations at home or school will aggravate all of these symptoms.

Academics

In academic areas, children with these disorders typically have uneven, and sometimes widely scattered profiles. They may be near, or above grade level in some subjects and show very low performance in others. They most often show strengths in tasks that require rote memory, in contrast to their weaknesses in areas where comprehension of cause and effect, and more abstract reasoning are necessary. They may have areas where their knowledge, expertise, and capacity for detail are astounding, and are a striking contrast to their inability to perform everyday functions.

Planning for Adult Life

The adolescent with Asperger Syndrome often has limited self-help and community skills. In order to be an independent adult, he must be able to care for all of his daily needs, get around in the community, and handle his finances. Many of the adolescents require special training to develop these skills. This may be incorporated into the educational program or worked on at home, but development of these skills is critical. Outcome studies of adults with Asperger Syndrome show that many require high levels of family and government support throughout life, in spite of their abilities.

Revised: 8/15/03

A challenge facing the parents and educators of high school aged children with Asperger Syndrome is finding a vocational outlet for the child's unique interests and abilities. Perseverative interests in maps, computers, time schedules, numbers, arranging things in sequence or groups, or sports statistics may have some vocational application. However helping the student find and keep a suitable job will require considerable dedication and ingenuity on the part of the parents, teachers and counselors. Children with more exotic interests may find vocational application of their abilities more difficult. Temple Grandin is a brilliant high functioning individual with Autism, who has written much about her life in articles and a book, entitled Emergence, Labelled Autistic. She reports how she was able to turn her perseverative interests in cattle and animal pens into a successful career designing animal pens and chutes, and veterinary facilities for large animals. In planning for the future independence, it is important to train students with Asperger Syndrome in the social skills necessary for employment. It is poor social skills, more than lack of educational or vocational competence that most often leads to difficulty in the work place.

School Implications of Asperger Syndrome

Intelligence, by itself, is not enough to succeed in school. Children with Asperger Syndrome have particular difficulty with the school setting. They typically require accommodations in the form of teaching style, behavior support, and social supports. Curriculum modifications are sometimes necessary. There is no one method or recipe which works with all students with Asperger syndrome, so adults must be flexible and creative.

- 1. Social supports, and social skills development need to be an ongoing part of educational planning. Children with Asperger Syndrome are frequently targets for bullies, and some degree of protection is mandatory, especially in secondary school. Preparation of normal peers to help them understand handicapped children's abilities and disabilities often facilitates more acceptance, and gives the child with Asperger Syndrome better behavior models.
- 2. Classes need a high degree of structure, with a consistent routine and a positive approach to behavior.
- 3. Academic difficulty can have many causes:
 - The subject is not in an area of interest, and the child does not do the work required to learn the material.
 - The child is trying, but does not understand what the teacher wants.
 - He may know the facts, but fail to understand the concepts surrounding the facts.
 - He may have difficulty with the higher level reasoning required in secondary school.
 - He may have an untreated attention disorder.
 - He may have a secondary emotional disorder, such as anxiety or depression which interferes with learning.

Revised: 8/15/03

- 4. Asperger Syndrome does not prevent an individual from having emotional disorders. Anxiety is very common, and makes all of the problems associated with Asperger Syndrome worse. Depression is also fairly common during adolescence. This aggravates the social disorder and may eliminate motivation to work in subjects of low interest. Both anxiety and depression may result in increased irritability, lower frustration tolerance, and increased "meltdowns."
- 5. Educational placement requires innovation and flexibility. The intellectual abilities of children with Asperger Syndrome may allow them to function academically within a general education classroom. However, their behavior often requires a more restrictive setting.
- 6. Accommodations may be necessary for sensory issues. A quiet, isolated work area should be available when needed. Be aware of the cumulative impact of sensory stimuli and social pressure over the course of the day. Physical education is often a difficult class because of low structure, limited supervision, the social nature of games, the child's poor coordination, and the noise and physical contact associated with sports. Modified physical education or adaptive physical education services are often necessary.
- 7. Areas where a child can choose to isolate himself to calm down should be available in all academic settings. A "safe" staff member should also be identified to help the child calm down when he cannot calm himself.
- 8. Children who do well in elementary school often have new difficulty during secondary school. This may be the result of a variety of factors:
 - More classes, more students, more social pressure
 - Higher levels of reasoning required for academic success
 - More variables in the daily schedule
 - Greater requirements for independence
 - The student is more aware of, and unhappy about his social isolation
 - Decreased sensitivity of peers
 - Hormones
- 9. Secondary school students may require more individual assistance, academic accommodations, and sometimes modification of parts of the curriculum. Curriculum adaptations must be carefully planned and highly individualized.
- 10. The secondary school curriculum may need to include instruction in living skills, community skills, and pre-vocational skills. This is true even if the child plans to attend college.
- 11. Direct instruction is required in areas of weakness.
- 12. The student's skill level, and generalizations of those skills, must be frequently assessed.

Revised: 8/15/03